



Amendment under 37 C.F.R. § 1.111
U.S.S.N 10/509,966

Q83979

AMENDMENTS TO THE SPECIFICATION

Please replace the paragraph no. 1 page 9 spanning to page 11 line 16 with the following amended paragraph:

The transmission/reception duplexer 51 receives a signal from an opposite station (transmitting side) through the antenna 52 and separates it. The transmission/reception duplexer 51 also sends out signals (transmission power control information) from the transmitters 65 and 75 to the opposite station (transmitting side) through the antenna 52. The receivers 61 and 71 convert V- and H-polarized reception signals separated/output from the transmission/reception duplexer 51 into medium-frequency signals. The demodulators 62 and 72 demodulate outputs from the receivers 61 and 71 and output the resultant signals. The adaptive equalizers 63 and 73 eliminate distortion components on the propagation paths from the outputs from the demodulators 62 and 72. The interference compensators 67 and 77 filter the outputs from the receivers 71 and 61 with specific frequency components on the basis of weighting coefficients from the coefficient controllers 68 and 78, and output compensation signals with the same levels as those of interference components and opposite phases thereto. The adders 64 and 74 eliminate the cross polarized wave interference components by adding the interference compensation signals generated by the interference compensators 67 and 77 to the output signals from the adaptive equalizers 63 and 73, and output the resultant signals as a V- polarized demodulated baseband signal 60 and H-polarized demodulated baseband signal 70, respectively. The reception determination devices 66 and 76 perform determination by comparing the reception levels detected by the receivers 61 and 71 with predetermined threshold levels (thresholds), and output transmission power control information for instructing to increase/decrease the transmitting side power on the basis of the determination results. The transmitters 65 and 76 send out the transmission power control information output from the reception determination devices 66 and 76 to the opposite station (transmitting side) through the transmission/reception duplexer 51 and antenna 52. The coefficient controllers 68 and 78 generate weighting coefficients to be output to the interference compensators 67 and 77 on the basis of the transmission power control information obtained from both the reception determination devices

66 and 76, and output them. The coefficient controllers 68 and 78 and the interference compensators 67 and 77 constitute an interference compensation amount adjusting means.